

## **ATTACHMENT B**

**EXHIBIT A**

**CONSOLIDATED LIST OF CLAIM TERMS AND FAIRCHILD'S PROPOSED CONSTRUCTIONS WITH PRELIMINARY IDENTIFICATION OF EXTRINSIC EVIDENCE**

Item	Patent	Claims	See Also Patent/Claims	AOS item	Fairchild item	Term, Phrase, or Clause	Fairchild's Construction	Extrinsic Evidence
1	5,767,567	7			13	gate runners	Gate-metal stripes that provide electrical contact between the gate(s) and the gate contact (pad), where a gate runner can extend partially across the surface of the device or entirely across the surface of the device, and in the latter case may have a middle opening.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
2		7			14	determining a total number of lead wires	Determining, prior to configuring the gate runners, the number of lead wires that will be used for contacting the source contact area by considering the number of lead wires the device needs and the number of lead wires the lead frame can accommodate.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
3		7			15	MOSFET power device	A metal oxide semiconductor field effect transistor device formed on a die in which the source contact area and the drain electrode for the device	Fairchild may submit expert testimony regarding the background of the technology of the

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							are located on opposite sides of the die.	patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
4		7			16	configuring said gate runners	Arranging the gate runners, after determining the total number of lead wires, to define subcontact areas that are not all equal in size and that have area ratios proportional to the number of lead wires in each subcontact area.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
5		7			17	several sub-contact areas	Three or more sub-contact areas that are not all equal in size and that are defined by gate runners.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 1754.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the

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								claim terms as set forth herein.
6		7			18	set of area proportional ratios	The area ratios of the subcontact areas defined by the gate runners.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
7		7			19	several	Three or more.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 1754.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
8		7		5		configuring said gate runners for dividing said source contact	Arranging the gate runners, after determining the total number of lead wires, to	<i>Webster's Encyclopedic Unabridged</i>

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						area into several sub-contact areas with a set of area proportional ratios	define three or more subcontact areas that are not all equal in size and that have area ratios proportional to the number of lead wires in each subcontact area.	<i>Dictionary of the English Language</i> , 1996, p. 1754.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
9		7		6		disposing several of said lead wires in each of said sub-contact areas according to said set of area proportional ratios	Connecting three or more lead wires to each subcontact area such that the area ratios of the subcontact areas are proportional to the number of lead wires in each subcontact area.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 1754.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
10	5,907,776	1, 13, 25		4	20	compensating a	Implanting impurities of the	Fairchild may submit

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						portion of said body region by implanting material of said second conductivity type in said body region	second conductivity type into the body region such that the peak concentration of that implant is located in the body region, and such that the conductivity type at the location of the peak concentration of that implant does not change.	expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
11		1		1	21	proximal to said source region	Situated in the body region near the boundary between the source region and the body region.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 1557.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
12		13, 25		2	21	adjacent to said source region	Situated in the body region near the boundary between the source region and the body region.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 25.

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								Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
13		1			22	so as to reduce the impurity concentration of said first conductivity type in said portion of said body region	So as to reduce the net concentration of impurities of the first conductivity type in the compensated portion of the body region, but not so much as to change the conductivity type at the location of the peak concentration of the compensating implant.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
14		13, 25			23	substantially reduced so as to decrease the gate threshold voltage of said trench gate  substantially reduced so as to decrease the gate threshold voltage of said gate	This claim language is indefinite.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set

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15		1, 13, 25		3		spaced from said diffusion boundary	Located a sufficiently large distance from the junction between the body region and the epitaxial layer so that the depletion region that is formed when the device is in use does not encroach into the source region.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
16	5,930,630	1		24		applying a polysilicon mask for etching said polysilicon layer to define a plurality of polysilicon gates	Applying a mask having a plurality of openings to allow the removal of areas of a polysilicon layer to form a plurality of polysilicon gates corresponding to the plurality of areas of the mask which are not open.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
17		1		25		overlying insulation layer	An insulation layer that becomes part of the finished MOSFET device through which contact openings are formed.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set

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18		1			26	self-aligned	Made through the same opening in the insulation layer.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
19		3		7		top portion of said substrate	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
20	6,429,481	1, 6, 15	'406, claims 1; 13		1	a pair of doped source junctions having dopants of the first conductivity type, and positioned on opposite sides of the trench  a pair of doped source junctions, positioned on		

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						<p>opposite sides of the trench and extending along the length of the trench, the source junctions having the first conductivity type</p> <p>a pair of doped source regions formed on opposite sides of the trench</p> <p>a pair of doped source junctions positioned on opposite sides of each trench, the source junctions having dopants of the first conductivity type</p>		
21		1	'406, claim 1; '195, claim 1; '111, claim 29	10	2	<p>a doped well ... formed into the substrate to a depth that is less than the predetermined depth of the trench</p> <p>a doped well ... formed into the substrate to a second depth that is less than said first depth of the trench</p> <p>a doped well in the substrate to a second</p>	<p>Fairchild does not believe construction of this term is required. The ordinary meaning should apply.</p> <p>Fairchild does not believe construction of this term is required. The ordinary meaning should apply.</p> <p>Fairchild does not believe construction of this term is</p>	<p>Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.</p>

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						<p>depth that is less than said first depth of the plurality of trenches</p> <p>a well between adjacent trenches to a second depth that is shallower than the first depth</p> <p>a plurality of doped wells ... respectively to a second depth that is less than said first depth of the plurality of trenches</p>	<p>required. The ordinary meaning should apply.</p> <p>Fairchild does not believe construction of this term is required. The ordinary meaning should apply.</p> <p>Fairchild does not believe construction of this term is required. The ordinary meaning should apply.</p>	
22		1			3	said heavy body extending into said doped well to a depth that is less than said depth of said doped well		
23		6, 15			4	<p>the deepest portion of said heavy body extending less deeply into said semiconductor substrate than said predetermined depth of said trenches</p> <p>the doped heavy body extending into the doped well to a second depth that is</p>		

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						less than the first depth		
24		1, 6, 15	'406, claims 1, 13; '195, claims 1, 21	9	5	wherein the heavy body forms an abrupt junction with the well  wherein the doped heavy body ... forms an abrupt junction with the well	The transition between the heavy body and the well occurs over a short distance relative to the depth of the well.  The transition between the heavy body and the well occurs over a short distance relative to the depth of the well.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
25		1, 6, 15	'406, claims 1, 13	11, 12	6	depth of the junction, relative to the depth of the well, is adjusted so that a transistor breakdown initiation point is spaced away from the trench in the semiconductor when voltage is applied to the transistor  a location of the abrupt junction relative to the depth of the well is adjusted so that a transistor breakdown initiation point is spaced away from the trench in the semiconductor, when voltage is applied to	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.  Fairchild does not believe construction of this term is required. The ordinary meaning should apply.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.

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						the transistor  depth of the heavy body relative to a depth of the well is adjusted so that breakdown of the transistor originates in the semiconductor in a region spaced away from the trenches when voltage is applied to the transistor  depth of the heavy body junction relative to a maximum depth of the well, is adjusted so that a peak electric field in the substrate is spaced away from the trench when voltage is applied to the transistor	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.  Fairchild does not believe construction of this term is required. The ordinary meaning should apply.	
26	6,521,497	1, 7			7	patterning		
27		1		NEW		wherein said dosage of said second dopant has a doping concentration that is greater than said dosage of said third dopant	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one

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								of ordinary skill in the art would construe the claim terms as set forth herein.
28	6,828,195	8, 9	'111, claims 30, 31	8		double implant process	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.  If it is construed, it means a process involving two implant steps to form the plurality of heavy body regions.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
29	7,148,111	29			8	plurality of doped wells		
30		29		NEW		plurality of doped wells in the plurality of epitaxial mesas	Two or more doped wells, each of which is located in one of the two or more epitaxial mesas.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
31		29		14	9	resulting in avalanche current that is substantially uniformly distributed	Resulting in avalanche current that is approximately evenly distributed across the active region of the device.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the

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								level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
32		29		13		adjusting a dopant profile of the plurality of heavy body regions so that peak electric field is moved away from a nearby trench toward the heavy body	Fairchild does not believe construction of this term is required. The ordinary meaning should apply.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
33		29		15		epitaxial mesas	Epitaxial structures having a relatively flat top surface and steep side surfaces, and interposed between adjacent trenches.	<i>Webster's Encyclopedic Unabridged Dictionary of the English Language</i> , 1996, p. 1204.  Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set

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								forth herein.
34	6,818,947	1, 5, 6		16, 17	10	acting as a field plate to extend the device breakdown voltage in the termination region  forming a field plate around the termination region	Acting as a conductive structure at or near the top surface of the substrate to increase breakdown voltage in the termination region.  Forming a conductive structure at or near the top surface of the substrate that increases breakdown voltage in the termination region.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
35		1		18	11	isolation trench	An insulating structure, having a wall near the die edge, which electrically isolates the body region from the die edge.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.
36		6			12	a plurality of elongated inner runners extending in the same direction	Conductive structures formed in trenches extending in the same direction across the active area of the device.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set

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37		1		19		single conductor	A contiguous structure of conductive material.	Fairchild may submit expert testimony regarding the background of the technology of the patents-in-suit, the level of ordinary skill in the art, and why one of ordinary skill in the art would construe the claim terms as set forth herein.

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